



Airline downsizing and its impact on team performance

Airline
downsizing

Amy L. Fraher

Bristol Business School, University of the West of England, Bristol, UK

109

Abstract

Purpose – The article draws on a mixed method study of US airline pilots in order to examine the impact of corporate downsizing on pilots' trust, morale, and organizational commitment. The aim of the paper is to review current literature on downsizing and high-risk teams and to identify gaps in the understanding of how external influences like downsizing can impact high-risk team's operational performance through an increase in mistakes, distraction, and stress.

Design/methodology/approach – Data were obtained from 127 in depth pilot survey responses from captains and first officers from major US airlines and 43 semi-structured interviews of one to two hours in length.

Findings – Commercial pilots working in downsized airlines reported increased stress, distraction, and suspicion with a corresponding reduction in trust, morale, and organizational commitment.

Research limitations/implications – The article contributes to the literature in corporate downsizing and high-risk team performance. Insights from these areas provide a lens by which to evaluate post-9/11 managerial decision-making in one high-risk field, aviation, with implications for leadership in other fields of risky work.

Originality/value – Although research examining leadership and teamwork in high-risk fields has been growing, few studies consider managerial decisions and the resultant organizational climate within which these teams must operate, particularly in the post-9/11 period. Findings suggest that this is a unique, emerging area that warrants further research.

Keywords Downsizing, High-risk teams, Job loss, Airlines, United States of America

Paper type Research paper

Introduction

Interest in examining leadership in high-risk fields has been growing with a particular focus on identifying the dynamics of good teamwork (Cuncliffe and Eriksen, 2011, Fraher, 2011, Hannah *et al.*, 2009, Webber and Klimoski, 2004). Research has been conducted in areas such as medicine (Edmundson *et al.*, 2004, Edmundson, 2003), aviation (McKinney *et al.*, 2005), military (Snook, 2000, Weick and Sutcliffe, 2001), firefighting (Weick, 1995, 1993, Webber and Klimoski, 2004), law enforcement (Fraher, 2011), off shore oil (Flin, 1995, 1997), railroads (Roth *et al.*, 2006), and nuclear power (O'Hara and Roth, 2006).

The broad aim of these studies was to examine past leadership failures as a way to improve future team performance. Several unique factors affecting team performance – determined both by the nature of high-risk teams' risky tasks and their hazardous operating environments – were identified. These included time urgency, peer pressure, exposure to personal risk, professional competitiveness, interpersonal conflicts, reputation management, and living with the weighty repercussions of one's decisions. Such factors often combine in complex, unpredictable ways to make decision-making in high-risk teams a stressful activity (Fraher, 2005a). As a result of these studies, in addition to technical training, individuals working in high-risk fields now often receive instruction on leadership, communication, teambuilding, group dynamics, human factors, sense-making, stress management, assertiveness, decision-making, and role



management. Organizational structures have also been modified to create a more safety focused culture. The goal of these changes is to flatten organizational hierarchies that can stifle information exchange, improve team performance through better role management, and reduce misunderstandings that can lead to mistakes (Fraher, 2005b).

Yet, what researchers do not often examine in this body of research is how managerial influences and the resultant organizational environment in which these front-line teams must operate can also affect team performance. In contrast, this study considers the impact of corporate downsizing on aircrew at US commercial airlines in the post-September 11, 2001 (9/11) period. In the decade following 9/11, nearly every major US airline declared bankruptcy and over 200,000 airline employees lost their jobs including over 14,000 pilots at the seven major US air carriers, a 29 percent reduction in force (Bureau of Transportation Statistics, 2010). Although some employees took early retirement or left on their own accord, most of these workers were furloughed, or laid-off, with the right to be recalled to work when, and if, the company needs them again. Drastic downsizing such as this affects both the furloughed workers as well as the employee survivors and becomes particularly disorienting at companies which had previously fostered a team oriented culture like airlines. The question investigated here is what were some of the repercussions of this downsizing for airline employees?

The aim of this article is to contribute to the literature in organizational research studying the effects of corporate downsizing and case studies examining high-risk team performance. The first examines studies addressing the psychological impact of employee job loss and the second considers the literature identifying key elements of successful team operations in extreme contexts. These areas will be examined in more depth in the literature review section that follows. Insights from these areas provide a lens by which to evaluate post-9/11 managerial decision-making in one high-risk field, aviation, with implications for leadership in other fields of risky work.

Literature

Downsizing

In this section, I briefly introduce the literature on downsizing highlighting the prevalence of this managerial strategy at post-9/11 US air carriers. Since the recession of the 1980s, downsizing, defined as “the planned elimination of positions or jobs” (Kets de Vries and Balazs, 1997, p. 11), has become a favored business strategy for managers in a wide variety of troubled industries and struggling corporations. By eliminating employees, the downsizing company expects to reap both economic benefits, such as lower cost overhead, enhanced productivity, increased earnings, and organizational advantages, such as decreased bureaucracy, faster decision-making, and smoother communication (Barker and Mone, 1998, Mone, 1997).

For commercial airlines the added benefits of furloughing employees include increased scheduling flexibility, flatter organizational hierarchies, and the ability to retire less efficient aircraft, outsource operations and maintenance, close unproductive employee domiciles, and reduce associated personnel costs such as wages, health insurance, training, and pensions (Fraher, 2012). Since roughly one-third of airline costs are employee related (Gittell *et al.*, 2004), slashing costs by cutting jobs has come to be seen as an easy managerial solution for air carriers struggling in the hyper-competitive post-9/11 market.

This strategy became so popular in the first decade of the twenty-first century that 11 US airlines joined forces with varying levels of success: American Airlines acquired Trans World Airways (TWA) in 2001; America West acquired US Airways in 2005; Delta Air Lines merged with Northwest Airlines in 2008; United Airlines merged with Continental Airlines in 2010; and Southwest acquired ATA airlines in 2008 and AirTran in 2010, to name a few of the largest. Nearly all involved some form of downsizing and employee furlough (Fraher, 2012). Airline executives believe the resultant leaner, more flexible corporate infrastructure will allow their companies to respond more nimbly to market changes and increase their attractiveness for acquisition or merger, thereby boosting stock prices. Therefore, it seems that a majority of managers today see downsizing as a logical, useful and unavoidable tool, especially in times of crisis, just as an earlier generation viewed strong team oriented cultures and empowered employees as the key to organizational success (Reynolds-Fisher and White, 2000). Yet, what are some of the other ramifications of this managerial strategy for employees?

The downsizing process has spawned a burgeoning literature on the pros and cons, and the function and dysfunction, of personnel reductions (Kets de Vries and Balazs, 1997, 1996, Mone, 1997, Dougherty and Bowman, 1995, Bozeman, 2010, Cascio, 1993, Shore, 1996, Gittell *et al.*, 2006, 2004, Reynolds-Fisher and White, 2000, Stein, 1997). Several organizational studies found that downsizing did not help most companies achieve their economic goals because the anticipated benefits of cost-cutting like higher profits, lower expense ratios, and boosted stock prices failed to materialize (Cascio and Wynn, 2004, Cascio, 1993). Nor did anticipated organizational goals such as smoother communications, increased productivity, and greater entrepreneurship and innovation develop (Dougherty and Bowman, 1995, Mone, 1997, Cascio, 1993). Perhaps most important for the discussion here, nearly all downsized companies experienced problems with employee morale and trust (Kets de Vries and Balazs, 1997, p. 12, Mishra and Spreitzer, 1998).

High-risk teams

Although studies examining leadership and teamwork in “extreme contexts” have been growing, it nonetheless remains “one of the least researched areas in the leadership field” (Hannah *et al.*, 2009, p. 897). In the following section I review several recent studies examining high-risk team operations, noting in particular how few address the impact of cultural, managerial, or other external influences on team performance.

For example, Hannah *et al.* (2009) outlined a five component typology for teams in extreme contexts considering the threat, timeline, proximity, probability, and magnitude of consequences as key for an adaptive leadership response. Yet, their research ignored the impact of managerial decisions on frontline team performance assuming teams received unwavering organizational support in times of crisis. It remains a common assumption.

Sexton *et al.* (2000) studied error, stress, and teamwork in medicine and aviation, comparing attitudes of aircrews and medical professionals towards job performance, decision-making, fatigue, and communication. They found medical professionals were more likely to deny mistakes and the effect of fatigue, and least likely to accept input from junior staff. Although the study observed “research in safety critical industries tells us that to overcome this problem we must understand the system,” (Sexton *et al.*,

2000, p. 745) they nonetheless did not report investigating systemic influences such as organizational culture, fiscal factors, or managerial support.

Similarly, Makary *et al.* (2006) studied operating room teams in sixty hospitals, identifying considerable discrepancies between perceptions of good teamwork amongst medical professional groups. For instance, surgeons rated other surgeons' teamwork highly 85 percent of the time. Yet, nurses only rated surgeons highly 48 percent of the time. The study noted that the tradition of hierarchy in medicine and differences in communication, expectations, and techniques rooted in professional cultures might have been influential. Yet, it stops short of examining organizational or managerial influences that may reinforce these disparities.

Flin (1997) began studying offshore oil installations in the early 1990s and created training modules based, in part, on findings from aviation studies. Modules initially consisted of decision-making, communication, assertiveness, and stress management. Over time her research identified other critical elements such as team roles, group problem-solving, shared mental models, and team attitudes. Although Flin noted individual attitudes were predictors of behavior, the study stopped short of investigating how managerial behaviors and external influences can affect employee attitudes and team member performance.

Similarly, O'Hara and Roth (2006, p. 140) investigated nuclear power plant operations, calling it a domain that depends upon the coordinated activity of multi-person teams. They found in the best performing teams "members have clearly defined roles," yet "they nevertheless fluidly support each other and back each other up". To accomplish this sophisticated level of teamwork, the study emphasized the importance of openness and trust in teams, and developing and sustaining a shared understanding of the current operational state, goals, and procedures. Yet, once again, researchers failed to consider the impact of external systemic influences on team performance.

Only one study was found to specifically consider the impact of outside factors. Edmundson *et al.* (2004) studied 16 cardiac surgery teams' ability to adapt to the use of new technology in the operating room. In addition to observing team performance, the study considered team leader prestige, the educational background and experience of team members, and support, or lack thereof, from high-level management for the new medical procedures. Yet, researchers ultimately dismissed these systemic factors as inconsequential, focusing instead on individual team performance. They found, "teams whose members felt comfortable making suggestions, trying things that might not work, pointing out potential problems, and admitting mistakes were more successful" (Edmundson *et al.*, 2004, p. 131). Yet, their own study suggests how further research into how these open, trusting, and experimental environments can be fostered and sustained is warranted, particularly for high-risk teams operating in organizations facing financial challenges.

Hypotheses

Taking up the challenge to consider organizational cultural, managerial decision-making, and financial influences on high-risk team performance, this study examined the post-9/11 US airline industry in terms of two hypotheses:

- H1.* Commercial pilots working in downsized airlines will report diminished trust, morale, and organizational commitment, with a corresponding increase in suspicion and selfishness.

H2. Commercial pilots working in downsized airlines will report increased mistakes, distraction, and stress.

Methods

Research context

This study began as part of a larger independent research project investigating aviation safety and working conditions in the post-9/11 period. As a former airline pilot, I was able to gain insider access to commercial pilots, quickly gaining their trust and confidence. Respondents uniformly reported that the piloting profession was widely misunderstood and acknowledged that they rarely, if ever, spoke to outsiders. As one pilot put it:

[I] only [talk] with fellow pilots who have been furloughed. You can't talk to anyone else unless it's another furloughed pilot [..] No one else understands. They don't. They say things that are so stupid (Anthony).

Equally important to drawing highly personal and confessional views and stories from respondents, my prior experience as a pilot was a valuable resource in the subsequent interpretation and analysis of the material.

Data collection

I collected the data for this study between September 2010 and July 2011. Informants ($n = 127$) were all captains and first officers from major US airlines and replied to an online labor union forum inviting them to complete a web-based survey investigating their opinions about the aviation industry (see Figure 1). Some pilots in this study were actively employed at their airline, or had transferred to a new airline, others were on furlough or voluntary leave, awaiting recall to work. All were quite eager to participate; no respondents withdrew from the study, and no one refused to answer any question posed. The last survey question solicited respondents for a follow-on telephone interview. A total of 72 pilots (57 percent) volunteered, of those, 33 (26 percent) completed a semi-structured interview.

Informants, whose names have been changed to protect their anonymity, ranged in age from 32 to 63 years old, were predominately male (96 percent), and averaged 23 years of total aviation experience with 13.5 years flying at a major commercial airline and an average of 10,271 flight hours. In sum, they were all established professionals with significant aviation experience and years invested in their airline career.

Interview questions were designed to elicit comparisons between the pre- and post-9/11 work experience of US airline pilots. In particular, questions sought to identify pilots' observations of increased stress, mistakes, and distractions; their opinions about safety and aviation industry decision makers; and the impact of airline cost-cutting measures on employee performance:

- Can you please describe a timeline of your airline career?
- Can you describe how, in your experience, work conditions have changed at your airline since 9/11.
- How has this affected your job performance and the work of others?
- While flying at your airline, did you witness increased stress on the pilot workforce due to company cost cutting measures?

1. What percentage of pay reduction do you estimate that you have you experienced since pre-9/11 levels?
Average
56%
2. Since September 11th 2001 (9/11), have you pursued supplemental sources of income while employed as an airline pilot because of airline pay cuts and/or the need for additional income?
Yes 68% No 32%
3. Since 9/11, have you pursued employment outside of aviation because of an airline pilot job loss (Furlough, voluntary leave, etc.)?
Yes 70% No 30%
4. If recalled by your airline, will you return to work?
Yes, definitely 38% Unsure 50% No, definitely not 12%
5. Have you applied for employment at another airline?
Yes 48% No 52%
6. If hired as a pilot for another airline, would you quit your former airline to fly for them even if it meant a significant reduction in pay and seniority?
Yes, definitely 8% Unsure 47% No, definitely not 45%
7. Compared to pre-9/11, how safe do you feel US airlines are in general today?
Very Unsafe 1% Unsafe 21% Neutral 30% Safe 34% Very Safe 14%
8. Many airlines have explored merging in the post-9/11 period. How safe do you feel US airlines are during the merger process?
Very Unsafe 1% Unsafe 15% Neutral 39% Safe 32% Very Safe 13%
9. Many airlines have been in bankruptcy in the post-9/11 period. How safe do you feel US airlines are during the bankruptcy process?
Very Unsafe 8% Unsafe 30% Neutral 28% Safe 27% Very Safe 8%
10. How likely do you feel it is that a major airline accident will occur in the coming years due to post-9/11 airline cost-cutting?
Somewhat
Very Likely 24% Likely 46% Neutral 17% Unlikely 11% Very Unlikely 2%
11. While flying at your airline, how often did you witness increased stress on the pilot workforce due to post-9/11 company cost cutting measures?
Never 1% Very Rarely 3% Monthly 8% Weekly 17% Daily 71%

(continued)

Figure 1.
Airline pilot questionnaire
and results

12. How often did you witness questionable safety practices at your airline due to post-9/11 company cost cutting measures?

Never	Very Rarely	Monthly	Weekly	Daily
4%	22%	22%	22%	29%

13. How often did you witness mistakes and/or distractions on the flight deck because of post-9/11 cost-cutting and work rule changes?

Never	Very Rarely	Monthly	Weekly	Daily
2%	21%	16%	27%	33%

14. How competent are decision makers at leading your airline?

Very Competent	Competent	Neutral	Incompetent	Very Incompetent
1%	2%	14%	47%	36%

15. How competent are regulators at supervising safety in the US commercial airline industry?

Very Competent	Competent	Neutral	Incompetent	Very Incompetent
0%	5%	29%	41%	25%

16. Would you recommend an airline career to a young person today?

Yes	No
8%	92%

Figure 1.

- While flying at your airline, did you witness questionable safety practices due to company cost cutting measures?
- Do you feel that airlines are less safe now than they were before 9/11?
- Do you have confidence in the decision makers leading your airline?
- Do you have confidence in the aviation industry regulators to monitor safety?
- What are the biggest challenges facing the future of commercial aviation – what worries you most?

Over time a subgroup of 15 participants emerged from the initial interview group. Called “double furloughees”, these pilots had been furloughed twice from their airline in the post-9/11 period – first in 2001-2002 and then again in 2008-2009. Although all agreed to be interviewed again, ten were available during the allocated time period and were therefore selected to participate. Questions for this second round of interviews were designed to elicit pilots’ experience of being laid-off twice, their thoughts about unemployment, and the impact being furloughed for so long had on their lives and their identity. Questions were organized under four subthemes: career story, experience of being unemployed, changes in self, and challenges for the future (see Table I).

As a result, the principal data source included 127 in depth pilot survey responses and 43 semi-structured interviews of one to two hours in length. Interviews were conducted via telephone or skype, were digitally recorded and, depending on content, were either fully or partially transcribed. In addition, dozens of emails were exchanged with respondents over time to clarify discrepancies, expand discussion, and amplify points of interest. A wide range of secondary sources also was also used, such as Congressional hearings, Government Accounting Office (GAO) studies, Federal Aviation Administration (FAA) documents, National Transportation Safety Board

Sub-theme	Sample questions (a select list)
Career story	What has your job search been like? When you started your career, what did you envision for yourself – what was your dream? How do you feel about that dream now? How much control do you feel that you currently have over your career?
Experience of being unemployed	Can you compare your feelings after the first and second furlough – were they similar or different? How is unemployment affecting your family life? How well are you coping? Do you blame anyone for being furloughed?
Changes in self	Looking back at yourself – the person you were when you started your career – how much of him/her do you recognize in yourself today? What would you say are the main changes you have undergone? Does being furloughed change your sense of identity? How much of your working life do you share with those around you: Your friends, family and colleagues?
Challenges for future	Looking ahead, what do you see as the next stages in your career – in a perfect world, what would you like to have happen? What do you fear might actually happen? What would it take for you to give up on the airlines and start over in a new career?

Table I.
Sample interview questions second interview

(NTSB) reports, and books, journal articles, online resources, and newspapers. These resources provided important statistical information and other empirical data which helped address the research questions.

Data analysis

Interviews were mainly non-directive. Informants were asked open-ended questions and encouraged to talk about their life, feelings, family, and work. The pilots were keen to tell their stories; they were generally articulate, outspoken and believed that their plight could produce useful research. The study could easily have extended to double the number of respondents or more, but I felt that a critical mass of material had already been collected to enable me to draw some consistent and reliable conclusions. Instead of formally coding the data, I probed the data to tease out tensions, irregularities, and ambiguities. Audio recordings of the interviews were reviewed several times and correlated with the transcript to identify key responses and emerging patterns. This way of “working with the data” has proven to be a popular, valid, and valuable alternative to using coding software which can easily lapse into mechanical routine (Gabriel *et al.*, 2010, Thornborrow and Brown, 2009, Cuncliffe and Eriksen, 2011, Clarke *et al.*, 2009).

Joining Stewart and Lucio (2011, p. 328) I sought “active and conscious worker voices” and their narratives in order to “highlight patterns of collective expressions of what work does to people, their various struggles to make sense of this together with

their practical struggles against it". Gradually, themes emerged as interesting topics to investigate, partly as a result of an encounter with unexpected phenomenon. As some literature recommends, focusing on surprises and unanticipated responses may be a good methodological rule, encouraging findings that can offer new insights (Alvesson and Sveningsson, 2003).

Results

Although some studies observed that lay-offs can be beneficial for a few employees who find better jobs and increased employment security, typically organizational downsizing, with its host of accompanying psychological effects, is good neither for the laid-off workers nor the guilt-ridden survivors. A resultant "dirty dozen" of deleterious outcomes have been repeatedly documented including a decline in trust and commitment, and an increase in organizational rigidity, selfishness, and conflicts, to cite a few from the list (Cameron *et al.*, 1987). These were findings in this study as well.

Trust

Pilots in this study almost unanimously condemned their airlines' downsizing strategies, exhibiting an increase in suspicion and corresponding decline in trust for both airline managers and union leaders. Of the 127 pilots surveyed, 96 percent doubted the decision-making capacity of their airline and 36 percent regarded decision-makers as "very incompetent" (see Figure 1). One pilot interviewed noted, managers "are in a completely different world" from rank-and-file employees. "Managers just care about themselves, not the airlines" and by inference, not the employees.

When asked about the roots of this organizational discord, Anthony provided a common pilot response:

I blame management, bad management, greedy management [...] Rather than looking at what's going to make this a great company in the long run, they say what's going to make us a buck today? [...] [We] get one CEO after another [...] They want to outsource everything. They want to outsource the flying. They want to outsource the maintenance [...] All they would like to do is to sell a ticket and make a dollar. If they had no pilots, no flight attendants, no airplanes, they would be happy [because] they don't really want to be an airline.

Similarly Charles noted how post-9/11 managerial strategies have pitted employees in a war against their own airline:

I don't know what business [airline] executives have been in the last five years but I don't think it was the airline business. They talk a good talk, but when you are constantly at war with your employees, nothing good can come of that [...] It really is destructive to people's lives. I don't think these people care. They are only interested in making money – more, more, more money – for themselves and that's all they care about. They really didn't care about the success or failure of the company.

As a result of this sense that managers do not care about the success of employees or the airline, Aaron articulated the diminishing trust that many furloughed pilots felt: "The company's burned us twice and I think collectively that the union has burned us to a point too. We just don't want to subject ourselves to that again". Doug, another furloughed pilot, was even more specific: "I just don't trust those executives".

Similarly, Kevin, observed how the employee-management relationship had soured after 9/11 because of cost-cutting strategies like downsizing, further antagonizing employees into an adversarial relationship:

When I was first at [my airline in 1997] I didn't feel like I was at odds with management. I knew there was a labor versus management perspective, but there always appeared to be an ability to work that out. In the last decade, that doesn't seem to be the case [...] [Airline executives] are just ruthless. They don't care about their employees. They are sold out to a buck. It has become a "me-versus-you" industry.

Other informants reported similar feelings of being abandoned by the organization and betrayed by the labor union, increasing mistrust (Hoell, 2004). Several pilots described feeling "constant turmoil" at work, observing employees were "unhappy," "beat down," and pushed to the "breaking point". As a result, there was a "mood change" between employees and airline managers after 9/11 and management became "more of big brother," looking over workers' shoulders. Respondents felt this surveillance was "almost punitive and pervaded the whole environment" which "made people even more angry". Jason, a commuter airline captain who resigned to accept employment at a major air carrier before he was quickly furloughed, recalled the environment was so bad "It was almost a relief to find out I was getting furloughed because then I wouldn't have to deal with that poisonous atmosphere anymore".

Organizational commitment

After taking an average 56 percent pay cut, the sense of being antagonized by managerial policies and at war with the company further exacerbated the mistrust for airline decision makers, causing many pilots to withdrawn organizational commitment. For example Aaron noted:

Before 9/11, I was always willing to help out the company if they called me and needed a favor. Post-9/11, when I went back [to work from furlough], I was never willing to help out. I felt like I'd been burned by the company, burned by the union. I just wanted to do my job and go home.

Another pilot explained:

Before 9/11 being an airline pilot was a career. After 9/11, it was just a job. There's a big difference in your frame of mind going to your job verses going to your life long career [...] I don't have that pride anymore.

Other pilots like Henry had so little confidence in airline executives' ability to restore stability, they completely withdrew organizational commitment by seeking employment elsewhere:

I took a voluntary furlough. I didn't have confidence that the airline was going to survive, based on the things they were doing and the people who were running the place. It looked to me like [the airline] was in a death spiral.

Several pilots interviewed explained that it was not airline bankruptcy, pay cuts, or employee furloughs that were most unsettling to them. It was managerial strategies undertaken after downsizing to indoctrinate the surviving employees into the new post-9/11 organizational processes that made managers seem most hypocritical. One example was a mandatory employee training program in business education designed to teach workers how hard managerial decisions were during bankruptcy.

Several pilots described this training as a particular low point, a “Business 101’ briefing for kindergartners”. Besides being offended that they were required to attend this training unpaid on their day off and “embarrassed” to be playing “a stupid board game,” many employees resented executives’ efforts to artificially create a collaborative environment. Informants were appalled that their airline spent \$20 million hiring outside consultants to develop the training while simultaneously furloughing employees and cutting wages and benefits. Several people reported “riots breaking out” and “security” being called because employees became so enraged.

Andrew, a captain, observed how managers had “grossly miscalculated the depth of pilot anger and hostility” and resistance:

[All the business training accomplished] was to highlight just how out of touch our management team was. If they couldn’t gauge morale within their own employee group, how could we then have any confidence in their decision making as it related to a complex business?

One pilot recalled people crying, they were so humiliated: “Here was a company who had clearly broken employee spirit and morale” and “now they had the audacity to talk about things like quality and working together as a team. What a two-faced joke!”

Stress and distraction

So many air carriers considered bankruptcy, downsizing, merging, and restructuring in the post-9/11 period that Congress commissioned several studies to review the process (US Government Accountability Office, 2008, 2009, 2006). Yet, surprisingly, the studies found nothing detrimental about these business practices. What they failed to consider is how stressful and distracting this process is for employees who routinely lose money, benefits, control over their schedules – and often even their jobs – with little time to prepare.

Because seniority establishes the order for promotion, aircraft assignment, work schedules and pay, disputes over the integration of seniority lists can be particularly contentious and distracting for employees. Just consider America West and US Airways which, six years after their merger, have yet to fly as one airline due to legal disputes between their respective pilots’ unions over seniority. Examples of the repercussions of this stress and distraction are readily available. In this study, 98 percent of pilots interviewed witnessed mistakes or distractions on the flight deck because of airline cost-cutting and work rule changes; 60 percent saw this on a daily or weekly basis.

Other aviation industry incidents made headline news. Take for instance the United and Delta jets, transporting a combined 300 passengers, which came within 100 feet of colliding in Fort Lauderdale in 2007; the Northwest pilots who, out of radio contact for an hour, overflew their Minneapolis destination by 150 miles with 147 passengers onboard in 2009; and the Delta crew who in 2009 landed their 767 with 194 passengers on a taxiway at their hub airport, Atlanta-Hartsfield International, instead of their assigned runway. The increasing prevalence of these mistakes can be easily attributed to the stress and distraction of post-9/11 restructuring.

Shore (1996, p. 5) studied 80 laid-off professionals in a variety of organizations and found evidence of what he termed “post-downsizing stress syndrome”. Symptoms included anxiety about work-related issues which eventually affected people’s health, personal life, and attitude towards work, fostering a sense of desperation. Similarly, Cottle (2001) found the health of men – in particular, those who remained out of work

for more than six months – to be especially harmed because the trauma of unemployment deeply affected their sense of identity as men and providers for their family. Evidence of pilots declining mental health and stress were found in the current study as well.

Aaron reported how frightened and stressed he felt when he found out he would be furloughed:

There was a letter that went out and then there was a phone call. I knew [the layoff] was happening but that phone call felt like the guillotine blade was coming down [...] There were others relying on me and so I pictured the worst: bankruptcy, losing a home, losing my family [...] all the worst scenarios went around in my head [...] I was very scared.

Many pilots described the stress downsizing caused for their families as well, further amplifying their distraction at work. Greg noted:

It makes it hard, hating to go to work every day [...] It's hard on my family, my wife has to listen to me complain. It's not healthy for home life either [...] We've got guys [at the airline] [...] they're probably going to get divorced.

Financial unpredictability was frequently mentioned as causes of stress and distraction. Gilles reported how desperate some pilot's lives had become:

The whole financial stress [of losing your job]. It's not just a minor budget adjustment, marriages have been destroyed, houses have been lost. We've had suicides, it was unheard of here decades ago. We've had a number of pilot suicides. That's just a symptom of how difficult things have gotten for many, many individuals.

Jasper, a senior captain recalled nearly every flight "I was flying with a copilot that was being furloughed either that month or the next month. The stress" was "unbelievable". And "when there's stress on one pilot, there's definitely stress on both". Prompted in part by his experience of being airborne on 9/11 and suffering from post-traumatic stress syndrome, Jasper took time off, went into therapy, and completed a master's degree in counseling. He noted, "I have quite a bit of background in the effects of depression and stress [now]. It was really obvious to me that at least half of the guys I was flying with were clinically depressed". They "were probably at the level where they really shouldn't have been flying".

Discussion

One frequently identified problem with downsizing is that the strategies are typically conceived and administered at the top of the managerial hierarchy with little involvement from, or managerial attention to, front-line employees. This top-down decision-making process becomes particularly disconcerting in high-risk workplaces like aviation where management had previously championed teamwork and open communication through integrative programs like Crew Resource Management (CRM).

CRM is a popular safety philosophy which emerged about 30 years ago in aviation and is typically defined as a way for teams to use "all available resources – information, equipment, and people – to achieve safe and efficient flight operations" (Weiner *et al.*, 1993, p. 5). Today, CRM is mandated by the Federal Aviation Administration (FAA) and has become an integral part of a wider organizational safety culture at airlines and military squadrons worldwide; CRM-influenced programs have spread to nearly all high-risk fields (Fraher, 2005b, a, Helmreich *et al.*, 1999). As a result, one can now find CRM-related research published in a variety of non-aviation

journals around the world such as the *Association of Operating Room Nurses Journal* (Powell and Hill, 2006), *British Medical Journal* (Gaba, 2000, Helmreich, 2000, Sexton et al., 2000), *Canadian Journal of Anesthesia* (Helmreich and Musson, 2000), *Cognition, Technology & Work* (Guerlain et al., 2008), *Disaster Prevention and Management* (Paton and Flin, 1999), *Human Relations* (Fraher, 2004), *Journal of American College of Surgeons* (Makary et al., 2006), *Journal of International European Industrial Training* (Flin, 1995), *Journal of Nursing Administration* (Oriol, 2006), *Journal of Perinatal & Neonatal Nursing* (McConaughy, 2008), *Journal of Risk Research* (Mearns et al., 2001), *Management Communication Quarterly* (Ashcraft, 2005, McKinney et al., 2005), *Team Performance Management* (Flin, 1997, Flin et al., 2002), *The American Surgeon* (McGreevy et al., 2006), and even *The New Yorker* magazine (Groopman, 2005).

These studies typically provide evidence that poor leadership and fragmented teamwork combine with communication failures, role conflicts, and trust and authority issues, as common human factors precursors to accidents in high-hazard, high-reliability industries. Team training programs have evolved to address these issues as a way to support a wider organization safety culture. These programs embrace open communication, flatter hierarchies, and cooperative teamwork in which individuals are encouraged to speak-up, voice concerns and problem-solve collaboratively. The goal is to increase trust and diminish fear as a way to mitigate errors and avoid bad decisions. Yet once these same high-risk organizations downsized, employees who had been deeply indoctrinated into these teambuilding philosophies in their own work, now saw managers making decisions in a hierarchical way without the open communication and collaboration they had previously espoused. Thus, employees became suspicious and perceived managers to be behaving hypocritically.

As a result, we find support in this study for *H1*. In nearly all cases, airline pilot respondents reported a diminished sense of trust, lower morale, and reduced organizational commitment in their downsized organization, with a corresponding increase in suspicion and selfishness. In fact, several pilots believed airline managers antagonized workers and strategized to pit employee groups against each other to create disharmony. Obholzer (1994, p. 173) described this style of management as “‘paranoid-schizoid by choice’ fragmenting and splitting up systems instead of promoting collaboration,” as a way to make it more comfortable for managers to make difficult decisions.

In addition, significant support was also found for *H2*. Nearly all pilots reported experiencing, and witnessing increased stress, distraction and mistakes on the flightdeck (see Figure 1). Numerous near-miss incidents which have gained the media’s attention support the toll that downsizing, merging and restructuring is taking on employees’ mental health. As one pilot respondent noted, “The way the company puts pressure on the employees, it’s just a matter of time” before there is an accident; “something’s got to give”.

Interestingly, whether it was security changes, managerial practices, regulators, training, or airline culture, many pilots interviewed used the word “joke” to describe post-9/11 changes. This supports Miller’s (1999, p. 107) finding that companies trying the hardest to eliminate negative or ambivalent feelings may instead stimulate the most employee resentment, mistrust, and suspicion. In fact, Miller noted, for managers to “expect that surviving employees could be persuaded to be loyal to an employer who had been extremely disloyal to the hundreds of ex-employees who had lost their jobs was rightly seen as absurd”.

Similarly, Gittell *et al.* (2006) studied major US air carriers after 9/11 and found the managers who paid attention to the interrelatedness between relational reserves and financial reserves before and during the crisis, best contributed to organizational resilience post-crisis. More specifically, their study explained why Southwest Airlines – an air carrier which has never furloughed employees – recovered the fastest of all US airlines after 9/11 while United and US Airways – air carriers which laid-off the most employees – recovered the slowest. By 2005, Southwest’s stock traded at 92 percent of its pre-9/11 level while United and US Airways stock remained at 12 percent and 23 percent, respectively (Gittell *et al.*, 2006, p. 308).

As Southwest CEO Jim Parker observed, “We are willing to suffer some damage, even to our stock price, to protect the jobs of our people” (Conlin, 2001, p. 42). This prioritization of employees’ rights over shareholders’ interests is obviously in opposition to many managerial strategies and economists’ opinions, but founder Herb Kelleher explained Southwest’s philosophy this way: “Nothing kills your company’s culture like layoffs”. It is “shortsighted”. In contrast, not furloughing, particularly when times are tough, “breeds loyalty,” “a sense of security,” and “trust”; As a manager, “you want to show your people that you value them and you’re not going to hurt them just to get a little more money in the short term” (Brooker, 2001, p. 62).

As a result, Gittell *et al.* (2006) reported, managers’ commitment to maintaining strong employee relationships was essential to organizational resilience during a crisis and critical to the ability to respond effectively afterwards. If the downsizing was not properly managed, the resultant organizational damage likely included destruction of trust and loyalty; a reduction in information sharing and increase in secrecy, deception, and selfishness; and an increase in anger, vindictiveness, and feelings of victimization. Similarly, other studies found that the negative repercussions of downsizing could be mitigated if managers monitored communication, decision-making processes, and the managerial actions and inactions that affected employees’ perception of fairness and trust (Cascio and Wynn, 2004, Dougherty and Bowman, 1995). And Bozeman (2010) observed that one of the best predictors of positive recovery and employee performance after layoffs at a recently downsized hospital was managers’ consideration for employees’ morale and welfare during the layoff period.

Limitations

Although this study included pilots from most major US air carriers, a significant proportion of study volunteers (87 percent) were employed by a single carrier. This is perhaps because this airline had furloughed the most employees in the post-9/11 period thereby providing pilots with both the time and motivation to participate. Participants self-selected to be involved in this study, making the research sample non-random. The sample is not large enough to make statistically significant generalizations to the entire US commercial airline pilot population. In addition, as a former commercial airline pilot myself I am admittedly not unbiased. Nonetheless, the study provides significant material from which we can derive data and insights about personal experiences of working in the post-9/11 airline industry, providing an important benchmark investigation for further study of the impact of environmental and managerial factors on aviation team performance.

Conclusion

Drastic downsizing such as that experienced at US airlines in the post-9/11 period affects both the furloughed workers and the employee survivors. Although studies

examining leadership and teamwork in high-risk fields have been increasing, there remains a need to expand research to consider how external influences like downsizing impact frontline employees and their team performance in the short- and long-term.

This study found support for both hypotheses. Commercial pilots working in downsized airlines reported increased mistakes, distraction, and stress resulting in a decrease in trust, morale, and organizational commitment, with a corresponding increase in suspicion and selfishness. These findings make it clear that when high-risk organizations that have previously championed collaborative leadership, open communication, and coordinated teamwork as a central tenet attempt to downsize, particular leadership attention must be paid to decision-making processes and policies during the restructuring process. Otherwise, airline downsizing comes with a very high price tag for employees and their work teams, and will no doubt have long term implications for the airline itself.

References

- Alvesson, M. and Sveningsson, S. (2003), "Managers doing leadership: the extra-ordinarization of the mundane", *Human Relations*, Vol. 56 No. 12, pp. 1435-59.
- Ashcraft, K.L. (2005), "Resistance through consent? Occupational identity, organizational form, and the maintenance of masculinity among commercial airline pilots", *Management Communication Quarterly*, Vol. 19 No. 1, pp. 67-90.
- Barker, V.L. and Mone, M.A. (1998), "The mechanistic structure shift and strategic reorientation in declining firms attempting turnarounds", *Human Relations*, Vol. 51 No. 10, pp. 1227-58.
- Bozeman, B. (2010), "Hard lessons from hard times: reconsidering and reorienting the managing decline literature", *Public Administration Review*, Vol. 70 No. 4, pp. 557-64.
- Brooker, K. (2001), "The chairman of the board looks back", *Fortune*, May, p. 28.
- Bureau of Transportation Statistics (2010), available at: www.bts.gov
- Cameron, K.S., Kim, M.U. and Whetten, D.A. (1987), "Organizational effects of decline and turbulence", *Administrative Science Quarterly*, Vol. 32 No. 2, pp. 222-40.
- Cascio, W.F. (1993), "Downsizing: what do we know? What have we learned?", *The Executive*, Vol. 7 No. 1, pp. 95-104.
- Cascio, W.F. and Wynn, P. (2004), "Managing a downsizing process", *Human Resource Management*, Vol. 43 No. 4, pp. 425-36.
- Clarke, C., Brown, A.D. and Hailey, V. (2009), "Working identities? Antagonistic discursive resources and managerial identity", *Human Relations*, Vol. 62 No. 3, pp. 323-52.
- Conlin, M. (2001), "Where layoffs are a last resort", *Business Week*, October, p. 8.
- Cottle, T.J. (2001), *Hardest Times: The Trauma of Long Term Unemployment*, Praeger, Westport, CT.
- Cuncliffe, A.L. and Eriksen, M. (2011), "Relational leadership", *Human Relations*, Vol. 64 No. 11, pp. 1425-49.
- Dougherty, D. and Bowman, E.H. (1995), "The effects of organizational downsizing on product innovation", *California Management Review*, Vol. 37 No. 4, pp. 28-44.
- Edmundson, A. (2003), "Speaking up in the operating room: how team leaders promote learning in interdisciplinary action teams", *Journal of Management Studies*, Vol. 40 No. 6, pp. 1419-52.
- Edmundson, A., Bohmer, R. and Pisano, G. (2004), "Speeding up team learning", in Review, H.B. (Ed.), *Teams that Succeed*, Harvard Business School Publishing, Boston, MA, pp. 77-98.
- Flin, R. (1995), "Crew resource management for teams in the offshore oil industry", *Journal of European Industrial Training*, Vol. 19 No. 9, pp. 23-7.

- Flin, R. (1997), "Crew resource management for teams in the offshore oil industry", *Team Performance Management*, Vol. 3 No. 2, pp. 121-9.
- Flin, R., O'Connor, P. and Mearns, K. (2002), "Crew resource management: improving team work in high reliability industries", *Team Performance Management*, Vol. 8 No. 3, pp. 68-78.
- Fraher, A.L. (2004), "Flying the friendly skies: why US commercial airline pilots want to carry guns", *Human Relations*, Vol. 57 No. 5, pp. 573-95.
- Fraher, A.L. (2005a), *Group Dynamics in High-risk Teams: A 'Team Resource Management' Primer*, iUniverse Publications, New York, NY.
- Fraher, A.L. (2005b), "Team resource management (TRM): a Tavistock approach to leadership in high-risk environments", *Organisational and Social Dynamics*, Vol. 5 No. 2, pp. 163-82.
- Fraher, A.L. (2011), *Thinking through Crisis: Improving Teamwork and Leadership in High-risk Fields*, Cambridge University Press, New York, NY.
- Fraher, A.L. (2012), "When profit-seeking trumps safety: the risks and opportunities of liminality in commercial aviation in post-9/11 America", in Long, S. and Sievers, B. (Eds), *Towards a Socioanalysis of Money, Finance and Capitalism: Beneath the Surface of the Financial Industry*, Routledge, New York, NY.
- Gaba, D.M. (2000), "Anaesthesiology as a model for patient safety in health care", *British Medical Journal*, Vol. 320 No. 7237, pp. 785-8.
- Gabriel, Y., Gray, D. and Goregaokar, H. (2010), "Temporary derailment or the end of the line? Managers coping with unemployment at 50", *Organization Studies*, Vol. 31 No. 12, pp. 1687-712.
- Gittell, J., von Nordenflycht, A. and Kochan, T.A. (2004), "Mutual gains or zero sum? Labor relations and firm performance in the airline industry", *Industrial & Labor Relations Review*, Vol. 57 No. 2, pp. 163-80.
- Gittell, J., Cameron, K., Lim, S. and Rivas, V. (2006), "Relationships, layoffs, and organizational resilience: airline industry responses to September 11", *The Journal of Applied Behavioral Science*, Vol. 42 No. 3, pp. 300-28.
- Groopman, J. (2005), "A model patient", *The New Yorker*, May, p. 2.
- Guerlain, S., Turrentine, F.E., Bauer, D.T., Calland, J.F. and Adams, R. (2008), "Crew resource management training for surgeons: feasibility and impact", *Cognition, Technology & Work*, Vol. 10 No. 4, pp. 255-65.
- Hannah, S.T., Uhl-Bien, M., Avolio, B.J. and Cavarretta, F.L. (2009), "A framework for examining leadership in extreme contexts", *The Leadership Quarterly*, Vol. 20, pp. 897-919.
- Helmreich, R.L. (2000), "On error management: lessons from aviation", *British Medical Journal*, Vol. 320 No. 7237, pp. 781-5.
- Helmreich, R.L. and Musson, D.M. (2000), "Surgery as team endeavour", *Canadian Journal of Anesthesia*, Vol. 47 No. 5, pp. 391-2.
- Helmreich, R.L., Merritt, A.C. and Wilhelm, J.A. (1999), "The evolution of crew resource management training in commercial aviation", *International Journal of Aviation Psychology*, Vol. 9 No. 10, pp. 19-32.
- Hoell, R.C. (2004), "The effect of interpersonal trust and participativeness on union member commitment", *Journal of Business and Psychology*, Vol. 19 No. 2, pp. 161-77.
- Kets de Vries, M. and Balazs, K. (1996), "The human side of downsizing", *European Management Journal*, Vol. 14 No. 2, pp. 111-20.
- Kets de Vries, M. and Balazs, K. (1997), "The downside of downsizing", *Human Relations*, Vol. 50 No. 1, pp. 11-50.
- McConaughy, E. (2008), "Crew resource management in healthcare: the evolution of teamwork training and MedTeams®", *Journal of Perinatal & Neonatal Nursing*, Vol. 22 No. 2, p. 96.

-
- McGreevy, J., Otten, T., Poggi, M. and Robinson, C. (2006), "The challenge of changing roles and improving surgical care now: crew resource management approach", *The American Surgeon*, Vol. 72 No. 11, pp. 1082-8.
- McKinney, E.H.J., Barker, J.R., Davis, K.J. and Smith, D. (2005), "How swift starting action teams get off the ground", *Management Communication Quarterly*, Vol. 19 No. 2, pp. 198-237.
- Makary, M.A., Sexton, J.B., Freischlag, J.A., Holzmueller, C.G., Millman, E.A., Rowen, L. and Pronovost, P.J. (2006), "Operating room teamwork among physicians and nurses: teamwork in the eye of the beholder", *Journal of American College of Surgeons*, Vol. 202 No. 5, pp. 746-52.
- Mearns, K., Flin, R. and O'Connor, P. (2001), "Sharing worlds of risk; improving communications with crew resource management", *Journal of Risk Research*, Vol. 4 No. 4, pp. 377-92.
- Miller, E. (1999), "Dependency, alienation, or partnership?", in French, R. and Vince, R. (Eds), *Group Relations, Management, and Organization*, Oxford University Press, Oxford, pp. 98-111.
- Mishra, A.K. and Spreitzer, G.M. (1998), "Explaining how survivors respond to downsizing: the roles of trust, empowerment, justice, and work redesign", *Academy of Management Review*, Vol. 23 No. 3, pp. 567-87.
- Mone, M.A. (1997), "How we got along after the downsizing: post-downsizing trust as a double-edged sword", *Public Administration Quarterly*, Vol. 21 No. 3, pp. 309-36.
- O'Hara, M.A. and Roth, E.M. (2006), "Operational concepts, teamwork, and technology in commercial nuclear power stations", in Bowers, C., Salas, E. and Jentsch, F. (Eds), *Creating High-tech Teams*, American Psychological Association, Washington, DC, pp. 139-59.
- Obholzer, A. (1994), "Managing social anxieties in public sector organizations", in Obholzer, A. and Roberts, V.Z. (Eds), *The Unconscious at Work: Individual and Organizational Stress in the Human Services*, Routledge, London and New York, NY, pp. 169-78.
- Oriol, M.D. (2006), "Crew resource management: applications in healthcare organizations", *Journal of Nursing Administration*, Vol. 36 No. 9, p. 402.
- Paton, D. and Flin, R. (1999), "Disaster stress: an emergency management perspective", *Disaster Prevention and Management*, Vol. 84 No. 4, pp. 261-7.
- Powell, S.M. and Hill, R.K. (2006), "Home study program: my copilot is a nurse – using crew resource management in the operating room", *Association of Operating Room Nurses Journal*, Vol. 83 No. 1, pp. 178-206.
- Reynolds-Fisher, S.R. and White, M.A. (2000), "Downsizing in a learning organization: are there hidden costs", *Academy of Management Review*, Vol. 25 No. 1, pp. 244-51.
- Roth, E.M., Multer, J. and Raslear, T. (2006), "Shared situation awareness as a contributor to high reliability performance in railroad operations", *Organization Studies*, Vol. 27 No. 7, pp. 967-87.
- Sexton, J.B., Thomas, E.J. and Helmreich, R.L. (2000), "Error, stress and teamwork in medicine and aviation: cross sectional surveys", *British Medical Journal*, No. 320, pp. 745-9.
- Shore, B. (1996), "The legacy of downsizing: putting the pieces back together", *Business Forum*, Vol. 21 Nos 3/4, p. 5.
- Snook, S. (2000), *Friendly Fire: The Accidental Shootdown of US Black Hawks over Northern Iraq*, Princeton University Books, Princeton, NJ.
- Stein, H.F. (1997), "Death imagery and the experience of organizational downsizing", *Administration & Society*, Vol. 29 No. 2, pp. 222-47.
- Stewart, P. and Lucio, M. (2011), "Collective narratives and politics in the contemporary study of work: the new management practices debate", *Work, Employment & Society*, Vol. 25 No. 2, pp. 327-41.

- Thornborrow, T. and Brown, A.D. (2009), "Being regimented": aspiration, discipline and identity work in the British Parachute Regiment", *Organization Studies*, Vol. 30 No. 4, pp. 355-76.
- US Government Accountability Office (2006), *Airline Deregulation: Reregulating the Airline Industry Would Likely Reverse Consumer Benefits and Not Save Airline Pensions Structural Costs Continue to Challenge Legacy Airlines' Financial Performance*, Congressional Committees, Washington, DC, report to Congressional Committees, June.
- US Government Accountability Office (2008), *Potential Mergers and Acquisitions Driven by Financial and Competitive Pressures, Report to the Subcommittee on Aviation Operations, Safety and Security, Committee on Commerce, Science, and Transportation*, US Senate, Washington, DC, July.
- US Government Accountability Office (2009), *Commercial Aviation: Airline Industry Contraction Due to Volatile Fuel Prices and Falling Demand Affects Airports, Passengers, and Federal Government Revenues, Report to Congressional Committees*, Congressional Committees, Washington, DC, April.
- Webber, S.S. and Klimoski, R.J. (2004), "Crews: a distinct type of work team", *Journal of Business and Psychology*, Vol. 18 No. 3, pp. 261-79.
- Weick, K.E. (1993), "The collapse of sensemaking in organizations: the Mann Gulch disaster", *Administrative Science Quarterly*, Vol. 38 No. 4, p. 628.
- Weick, K.E. (1995), *Sensemaking in Organizations*, Sage, Thousand Oaks, CA.
- Weick, K.E. and Sutcliffe, K.M. (2001), *Managing the Unexpected*, Jossey-Bass, San Francisco, CA.
- Weiner, E.L., Kanki, B.G. and Helmreich, R.L. (Eds) (1993), *Cockpit Resource Management*, Academic Press, San Diego, CA.

About the author:

Amy L. Fraher, EdD is a Senior Lecturer in Organization Studies, Bristol Business School, University of the West of England. A retired US Military Officer and Naval Aviator, and former United Airlines pilot, she has over 30 years of leadership experience in high risk fields. Her research interests include leadership, team effectiveness, critical crisis management, and disaster analysis. She has published widely including *The Next Crash: How Profit-Seeking Trumps Safety in Commercial Aviation*, *Thinking through Crisis: Improving Teamwork and Leadership in High Risk Fields*, *Group Dynamics for High-risk Teams*, *A History of Group Study and Psychodynamic Organizations*, and in journals such as *History of Psychology*, *Human Relations*, *Organisational and Social Dynamics*, and *Socio-analysis*. Amy L. Fraher can be contacted at: amy.fraher@uwe.ac.uk